1: Beals E-5 (1940-1941) 1946 NU34 Tarasco NU34
Sierra Tarascans

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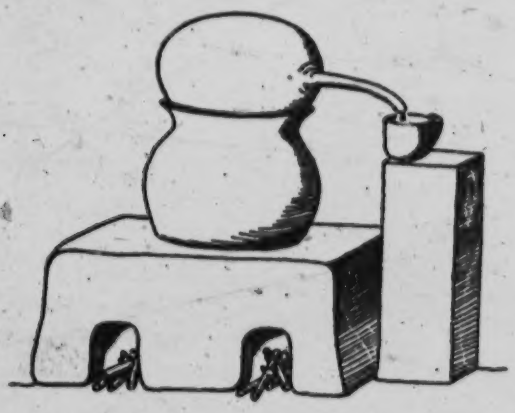

a

b

c

FIGURE 2.—Tarascan still. a, Perspective view. b, Cross-sectional view from side. c, Schematic view of fireplace from above.

1:Beals E-5 (1940-1941)1946 NU34 Tarasco NU34

313 Cherán prefers shakes 5 *cuartas* in length,
304 called "thick shakes" (tasámani tiápiti).
438 Shakes of 4 *cuartas* (1 *vara*) are sold primarily in Uruapan and are spoken of as *de comercio*, or "small shakes" (tasámani sapírati). Shakes 6 *cuartas* long, preferred by some Tarascan towns, are called "long shakes" (tasámani iórati). In Angáhuan, shakes 5 *cuartas* long are sold in Zamora and are sometimes called Zamorana.

313 Shake makers usually work from 8 a. m. to 6 p. m. A week's work routine is as follows: On Tuesday suitable trees are sought and felled. Wednesday is devoted to cutting trees in sections. Thursday and Friday the timber is split into shakes. One day is spent drying the shakes in the sun, and, if the maker is a professional, the finished product is taken to Uruapan or Zamora on Saturday and Sunday for sale. On this schedule one person might make two bundles of 400 shakes (two irépitas) in a week.

313 Railroad ties are usually made under contract
439 arrangements. The workers leave town on
397 Tuesday, usually arriving in time to cut a week's supply of logs for splitting and shaping. Wednesday, Thursday, and Friday are spent in splitting and shaping the ties with the ax. Saturday the ties are checked by the contractor, and the men are paid in time to return home that night.

313 A minor industry is cutting out blocks of
322 madroña and jaboncillo wood. These are sold
438 in Paracho, where they are made into doors, spoons, wooden bowls, and the various small wooden objects for which Paracho is famous. A few people in Cherán also make broom handles.

314 A considerable amount of charcoal is produced on the more distant lands of Cherán. Several men in town make their living entirely from charcoal burning. Oak is used almost exclusively for charcoal. Charcoal burners usually spend from Monday until Friday in the woods, and return home over the week end. Charcoal is usually sold in the woods to dealers, the unit of sale being a stack 8 by 7 inches by 6 feet.

In a number of Tarascan towns turpentine production is an important industry. This has been true of Cherán in the past, but, for reasons not discoverable, output at present is

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314 negligible. Turpentine is produced at any season of the year. The first cut in trees is made about 20 or 25 cm. (8 or 10 in.) from the ground, with a small ax called gúrbia. The initial cut is one-half cm. vertically and 10 cm. horizontally. At the base of the cut a small copper or pottery cup is fastened. The initial cut is lengthened upward each year until, after about 10 years, the cut is 1.50 to 1.70 m. in height. A cut is then started on the opposite side of the tree. Formerly it was the practice to leave the cup for collecting the resin at the bottom of the cut. This wasted considerable resin, and now the cup is raised as the height of the cut is increased. In order to lead the resin into the cup, a small sheet of metal is driven into the tree just above the cup. The cup is emptied every 3 days and the cut cleaned or enlarged.

The collected resin or *brea* is cooked in special stills. An *olla* of resin is placed above a fire-
[323] box (fig. 2). The cover and "coil" are made of pottery (in the village of Patamban), and the turpentine is caught in another vessel. Before the decline in turpentine prices caused by World War II, a kilo of resin sold at 8 centavos in the woods and a 5-gallon tin of turpentine
[435] sold at 18 pesos. In 1941, prices were 4 or 5 centavos for a kilo of resin with a corresponding drop in turpentine prices.

HUNTING

224 Probably no one in Cherán derives any considerable part of his livelihood from hunting. Some men hunt casually because their farms or lumbering activities take them where game is more plentiful. Others hunt a good deal because they enjoy it. Finally, sometimes people hunt because they are poor and thus can augment their food supply or income.

The most commonly hunted animals are deer, peccary (guákin), squirrels (both ordinary, kuínike, and flying squirrels), rabbits, quail, pigeons, and less commonly, armadillos. Other local wild animals are not eaten. Heavy rifles
[411] are used for large animals, usually .30 or .32 caliber, and .22 caliber rifles for squirrels.

Deer are sometimes trapped in pits in the mountains. Squirrels are caught in snares. Horsehair threads are used to make snares to
223 catch quail and pigeons. Quail snares are hung

231 *Bees*—While a moderate number of families have a few hives of bees, most of the apiculture in Cherán is carried on by a few men who may have 20 to 30 colonies. Only European bees are kept.

Beehives are wooden boxes, about 80 cm. long, 20 to 35 cm. wide, and 25 to 40 cm. high. The entrance is at one end, while the wax and honey are taken by opening the back. The hives are placed on benches or poles at intervals of about one-half meter. Lizards are believed to eat the larvae. Flowers and scented herbs are often planted in the area surrounding the hives. Wherever bees are kept, copal gum is burned in pottery censers. It is said to "feed" the bees because "the odor of copal is the odor of our Lord." It is believed it also prevents bees from leaving. No other ritual or belief could be discovered.

237 Honey and wax are usually taken from the hives in October or November. If delayed much after this time, the honey sugars and cannot be extracted. The honey gatherer places a net over his head and burns wheat straw to stupefy the bees. The top of the hive is smeared with honey so the bees will not leave. Should they leave the hive and not return by late afternoon, a small bell is rung to attract them.

231 When bees swarm, a bell is rung to make them alight in a nearby tree. A little honey is smeared over the inside of a box, which is then placed by the swarm. When a few bees have entered voluntarily, most of the remainder are brushed in and the box is closed and put in place. When it is opened, the bees usually remain. The function of the queen is known, and beekeepers can identify her.

One of the largest apiaries in Cherán contains 42 hives. The owner started beekeeping 17 years ago when he encountered a wild colony in the mountains and brought it home. He recovers 10 kilos of wax a year, which he sells in Cherán at $2.50 a kilo, and between 40 and 50 pounds of honey. Most of the latter he sells in small quantities at his home, but some is sold to stores.

All the work of caring for bees is done by men (with one exception, a widow), but if the wax is bleached, this may be done by women. Wax is used mainly for making candles.

313 *Plank making:*

433 *Tools:*

434 Oak mallet
Oak wedges
Ax
Two-handled saw

Expenses:

Haulage (ox team, horse, or even burros)
Forest use tax (now 10 pesos for membership in cooperative)

Production (with good workmen):

3 dozen planks per week

Gross profits:

$0.85 to 1.25 per day per person

Comment: Sawing planks requires two men, hence work is done by teams. The gross profits probably are very nearly all net, as deterioration of equipment is slight. Maintaining an average income of the larger size indicated would require 6 long work days a week for the most skilled workers.

Firewood cutting:

Some men at times cut firewood for sale. A burro load brings $0.25 to $0.30.

Tie cutting:

Data on this subject seem unreliable and are omitted.

314 *Charcoal burning:*

433 Beyond the fact that charcoal burners work a 5-day week, no economic data were secured. The little charcoal used in Cherán is sold at 2½ to 3 centavos a kilo delivered.

434

395 *Carpentry:*

433 *Tools:*

434 Mallet, saw, chisels, hammer, ax, adz, plane; value about $20–$30

Products, labor, value:

As each carpenter's job is unique, only a series of cases can be given, as follows:

[435] (a) Large door takes 4 days (10 to 12 hours daily), lumber cost $4, selling price $17, gross profit $13, daily return (not allowing for interest on capital, etc.) $4.25.

(b) Average door takes 4 days (6 to 7 hours daily) lumber cost $4, selling price $12, gross profit $8, daily return $2.

(c) Average door takes 6 days (but this carpenter has rheumatism and cannot work steadily), selling price $5 a door if lumber is furnished, daily return less than $1.

(d) House building or house moving, $1.50 daily (if done under contract, as usual).

Comment: As only carpenters with other members in the family to get wood, do chores, look after animals, etc. can work more than 6 or 7 hours a day, probably $2 a day is top income. Moreover, as work is not steady and as all seem eager to take house building or house

[465] moving jobs at $1.50, it may be assumed that average wages the year around are less than $1.50.

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438 pottery and the goods on sale are made at the
323 same pottery-making villages that supply the other markets.

796 The fiesta at Cheranástico for the Assumption of the Virgin is considered a large and important one. Services are held in the church at Cherán on this day, and the date is also observed as a fast day by many Mestizos, in Uruapan, for example.

At Capacuaro the patron saint is San Mateo. Small jars of atole are offered for sale and are purchased, together with the containers, as offerings to the saint. At Capacuaro it is said [314] that copal smoke is the food of God and that when He eats He smells the smoke. For this reason, it is said, the priests wave the censers when copal is burning.

796 The only town visited where no fiestas or
184 *moyordomías* are celebrated is Urupichio. All the fiestas in this town had formerly been given by *cargueros* or *mayordomos*. People took their duties so seriously that many sold their lands in order to give the *mayordomías* properly. As a result, a few wealthy people came to own all the land. When the revolution came, the town became a supporter of Zapata and later an agrarian town. After the revolution the lands were seized and divided up and the *mayordomías* and fiestas were abolished. The church, which was burned down during the revolution along with the rest of the village, has never been rebuilt. Instead of a religious
527 fiesta, Independence Day, September 16, is celebrated with bands and a *castillo*. The town is planning to have its own band. What the effects of this will be cannot be determined, but if the band is hired out to play at fiestas in other towns it may serve as the entering wedge for reviving the fiestas.

Data on the fiestas of a Mestizo town, Chilchota, are given in Appendix 2. They afford interesting comparative material.

MAYORDOMÍA ORGANIZATION AND THE CULT OF THE SAINTS

796 Approximately 13 saints exist in Cherán
776 which belong to groups only indirectly or not at all connected with the church. Each of these saints is in charge of an individual known as a *carguero* or *mayordomo* during a year or more and is associated with special procedures

313 ing is carried on outside the Sierra. Some beams and planks are cut by the people of Zipiajo and Teremendo, who have large tracts of forest on the slopes of El Zirate, and some farmers of the Lake area and La Cañada cut small amounts of lumber for home use.

313 423 Beals' discussion (1946, pp. 15–19) of legal cutting rights, lumber products, and lumber tools for Cherán can be applied to most of the present Sierra pueblos; therefore, only a summary will be given here. As mentioned above, all Sierra pueblos possess varying amounts of forest

313 [656] land held as common property. Since the late 1930's the Federal Government has attempted to control exploitation by placing all large forest areas under national domain, by encouraging the organization of local lumbering cooperatives, and by periodically inspecting lumbering activities.

[651] In most pueblos the Federal tax on lumber products is passed on to the individual woodsmen, who pay the town council a given amount for cutting rights. In other towns lumber coopera-

[474] tives have been formed to pay the tax, each member contributing dues and having sole cutting rights in the village forest lands.

Although much lumber is for local use (house

[439] construction, fences, aqueducts, watering troughs, shakes, etc.), most is cut for the outside market. Raw logs, beams (*vigas*), planks (*vigetas*, *tablas*), and railroad ties of pine and fir are cut and pre-

[493] pared for lumber contractors, whose heavy trucks visit the larger villages during the dry season to

[492] haul the products to the nearest railhead. Wood-cutters of the remote pueblos drag beams and planks to market with the aid of burros and mules.

[497] Los Reyes, Tingüindín, Tangamandapio, and Zamora handle the forest products from the western part of the Sierra, while Uruapan, Zacapu, Ajuno Station, and Pátzcuaro serve as lumber points for the eastern section. Formerly a significant forest industry, shake making (performed by skilled specialists) is slowly declining because of the increasing use of tile roofing.[138] Turpentine

314 is no longer distilled locally. (See Beals, 1946, p. 18, for illustration of Tarascan still.) Rather, the resin (*resina*) is gathered in 5-gallon tins and taken to the village, where they are periodically

[138] Although in some pueblos (Paracho and Cherán, Angahuan, Capacuaro) shakes are still made for export to Uruapan, most are used locally. During colonial times and even in the last century large quantities of shakes were shipped from the Sierra to the northern mines, where they were the principal roofing material.

314 picked up by trucks from turpentine distilleries in Uruapan and Morelia. Charcoal is a minor commercial forest product made by Tarascans living near mestizo towns. The latter comprise [312] the principal markets for charcoal, which has never entered Tarascan culture.[129] Other minor forest products consist of *ocote* splinters, used for primitive interior illumination;[130] softwoods 313 (madroño, jaboncillo, aile, etc.) for lathe work; pine and fir for cabinet work; etc.

Within the last 50 years the commercial sawmill has penetrated into the Sierra. Lumber companies purchase cutting rights of standing timber from the pueblos and set up a steam- or (when near a power line) electric-powered saw in the midst of the forest.[131] When the suitable timber has been depleted (under Federal inspection), the mill closes down, and the remnant of the forest reverts to the pueblo. Although most [464] companies bring in mestizo labor, many Tarascans from villages nearby obtain seasonal work in the sawmills, thereby supplementing their usually low income. Because of their ephemeral character, the number of mills in the area varies. In 1940 there were five mills in the Sierra proper; in 1946 the number had decreased to three.

During the last 100 years cutting has exceeded natural timber growth in the Sierra. Clearing of new plowland to sustain increased population and commercial lumbering have been the major factors of forest depletion. Moreover, disease has recently destroyed acres of pine in the vicinity of Tarecuato, and volcanic ash has laid waste the forest within a 3-mile radius of Parícutin. Lumbering even by the Tarascan woodsmen is often wasteful. Large trees are sometimes cut and left unattended for years until rot renders the wood useless.[132] Improper tapping for resin and testing for shakes often kill many trees. The sawmills, operating on a much larger scale than the native lumbermen, are even more destructive, and in former years they depleted large sections of Sierra forest. Approximately 50 years ago the timberland in the eastern part of the Sierra east

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[129] The main charcoal-producing towns in the area are San Lorenzo (Uruapan market), Opopeo and Cuanajo (Pátzcuaro market).

[130] The *rancheros* around Pamatácuaro gather much ocote, which the women market in the large mestizo towns bordering the Sierra.

[131] In 1944 the pueblo of San Felipe sold its forest to an Uruapan company for two million pesos. The proceeds were deposited in an Uruapan bank, where they remain communal property.

[132] Such wasteful exploitation was much in evidence in the forest lands of Paracho-Cherán on the southern slope of Cerro de Patamban.

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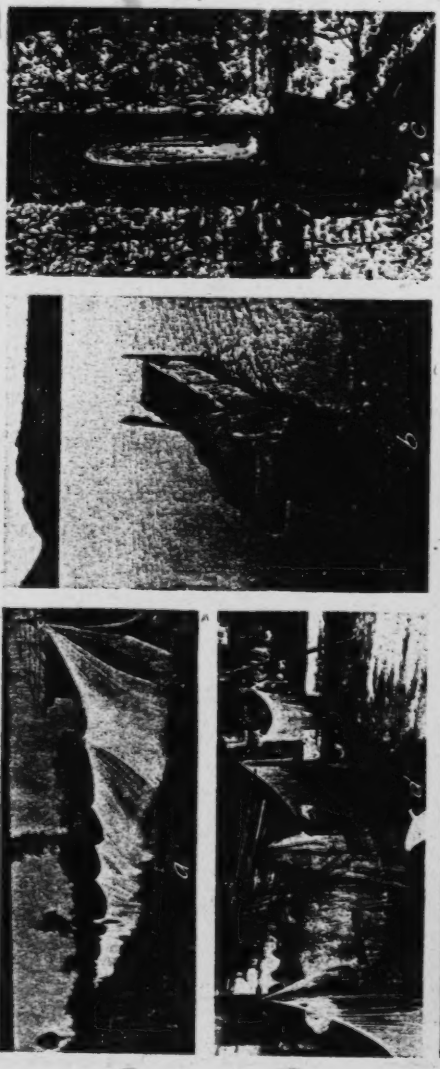

[End-plate 8]